

REMARKS/ARGUMENTS

Claims 1-4, 6, 8, 10, and 12-15 are active. Claims 16-22 have been withdrawn from consideration. Claim 2 has been amended for consistency with independent Claim 1 by dropping the word “apparent”. Page 4, line 18 of the specification also discloses a viscosity of 50 cP or higher.

Restriction/Election

Claims 16-22 have been withdrawn from consideration as being directed to a non-elected invention. The Applicants traverse this Restriction Requirement, since Claim 16 contains the same limitations as Claim 1 as well as the further explicit limitation “non-polymerized”.

Claim 1	Claim 16
<p>A nonaqueous liquid electrolyte having</p> <p>a viscosity at 20°C of 60 cP to 30,000 cP comprising:</p> <p>a nonaqueous solvent,</p> <p>an electrolyte dissolved in the nonaqueous solvent containing γ-butyrolactone, and</p> <p>a macromolecular material added to the nonaqueous solvent comprising the structure represented by the formula:</p> $\text{---}(\text{CH}_2\text{---CH}_2\text{---O})_n\text{---}$ <p>wherein $n \geq 1$,</p> <p>wherein the content of the macromolecular material added to the nonaqueous solvent is 0.01% or more, but less than 10% by weight, and</p> <p>wherein said nonaqueous liquid electrolyte is formulated for use in a liquid electrolyte secondary battery having a positive electrode containing an active material, a negative electrode containing a material which absorbs and desorbs lithium ions, and a liquid electrolyte sandwiched between the positive and negative electrodes.</p>	<p>A non-polymerized</p> <p>A nonaqueous liquid electrolyte having</p> <p>a viscosity at 20°C of 60 cP to 30,000 cP comprising:</p> <p>a nonaqueous solvent,</p> <p>an electrolyte dissolved in the nonaqueous solvent containing γ-butyrolactone, and</p> <p>a macromolecular material added to the nonaqueous solvent comprising the structure represented by the formula:</p> $\text{---}(\text{CH}_2\text{---CH}_2\text{---O})_n\text{---}$ <p>wherein $n \geq 1$,</p> <p>wherein the content of the macromolecular material added to the nonaqueous solvent is 0.01% or more, but less than 10% by weight, and</p> <p>wherein said nonaqueous liquid electrolyte is formulated for use in a liquid electrolyte secondary battery having a positive electrode containing an active material, a negative electrode containing a material which absorbs and desorbs lithium ions, and a liquid electrolyte sandwiched between the positive and negative electrodes.</p>

As shown above, the only difference between Claim 1 and Claim 16 is the term “non-polymerized” in the preamble of Claim 16. Accordingly, the Applicants respectfully request that at least Claims 16-21 be rejoined and examined.

Rejection—35 U.S.C. §112, first paragraph

Claim 2 was rejected under 35 U.S.C. 112, first paragraph, as lacking adequate description in the disclosure for “an apparent viscosity at 20 degrees C of 200 cP to 10,000 cP at a sheer rate of 200 S⁻¹. All of these terms appear in original Claim 2, which is part of the disclosure, except that the range has been changed from “50 cP to 10,000 cP” to the present range “200 cP to 10,000 cP”.

The issue appears to be whether the original disclosure supports the subrange “200 cP to 10,000 cP”. The Applicants clearly had possession of this subrange as of their filing date, because the original disclosure discloses the broader range 50 cP to 10,000 cP. Moreover, Example 9 (page 37) explicitly discloses a liquid electrolyte having a viscosity of 200 cP. Accordingly, the Applicants respectfully request that this rejection be withdrawn.

Rejection—35 U.S.C. §112, second paragraph

Claims 1-4, 6 and 8 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for using the terms “apparent viscosity” and “viscosity”. This rejection is moot in view of the amendment of Claim 2. Claim 4 has been amended to delete the definite article “the” before the term “apparent viscosity” to eliminate the antecedent basis issue. The term “apparent viscosity” is described on page 7, line 23-page 9, line 21 and refers to non-Newtonian fluids, e.g., fluids that exhibit sheer thinning or sheer thickening depending on the sheer rate.

Rejection—35 U.S.C. §103

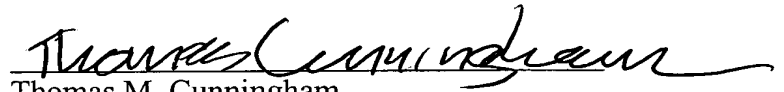
Claims 1-4, 6, 8, 10 and 12-15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al., U.S. 2002/0160269. The Applicants respectfully request that this rejection be withdrawn since Choi et al. is not prior art. Choi et al. was filed April 25, 2002, however, the U.S. filing date of the present application is February 27, 2002.

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully request reconsideration of the rejections of record and submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

Respectfully submitted,

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